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OUTLINE OF STRATIGRAPHIC RECORD OF CALIFORNIA

The manifold variety of physical features of California is matched by a most varied and eventful geologic record. This record, well-chronicled from the earliest known rocks through every major period in the earth's time scale down to the very active present, places California is an especially favored position for the study of historical geology.

Each division of the world's geologic time scale is well represented by geological formations in some part of the state. Local names of the representative and typical formations and the positions they occupy in local stratigraphic sections is shown in the selected columnar stratigraphic sections shown with the accompanying map of the state. This map indicates the distribution of the major rock units as related to the natural provinces of the state. These provinces are definitely related to the evolution of the structural and topographic development of California, and for that reason the following descriptions are arranged according to the provinces.

The geomorphic or natural provinces of California are: Sierra Nevada, Coast Ranges, Great Valley, Transverse Ranges and the Ventura and Los Angeles Basins, Peninsular Ranges, Cascade Range and the Modoc Plateau, Klamath Mountains, Desert Basins and Ranges.

Sierra Nevada. The Sierra Nevada is the greatest of California's mountain ranges, extending for over 400 miles from the southern Klamath Mountains and Cascade Mountains, at the north end of the Great Valley of California, south-southeast to the Tehachapi Mountains marking the southern end of the Great Valley. It is the most continuous and highest of the ranges in California, reaching its maximum elevation of 14,496 feet in Mt. Whitney near its southern end. The Sierra Nevada is a great, westward-tilted block with a very steep, high, eastern front and a gentle western slope which extends out under the Great Valley. The eastern front is marked by a series of discontinuous fault zones along which great movements have taken place extending into Recent times.

In detail the western Sierran slope is geologically complex, but columnar section 5 in the Copperopolis area is typical of the geologic formations to be found through much of the western Sierra Nevada. Slate, shale, and mildly metamorphosed rocks of the Upper Paleozoic Calaveras group have been intensely folded and stand vertically or are overturned. This complex of older rocks, and also

AN IMPORTANT MESSAGE

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